



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|--------------------|----------------------|-------------------------|------------------|
| 09/828,530 | . 04/06/2001 | Oumar Nabe | 17207-00008 | 6222 |
| 7590 02/07/2006 | | EXAMINER | | |
| John S. Beulick Armstrong Teasdale LLP | | | CHOI, PETER H | |
| | an Sq., Suite 2600 | | ART UNIT PAPER NUMBER | |
| St Louis, MI 6 | 53102 | | 3623 | • |
| | | | DATE MAILED: 02/07/2006 | • |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | | |
|--|---|--|-------------|--|--|--|--|
| | 09/828,530 | NABE ET AL. | NABE ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | |
| | Peter Choi | 3623 | | | | | |
| The MAILING DATE of this communication | | | iress | | | | |
| Period for Reply | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNIC. - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) of a lf NO period for reply is specified above, the maximum statuth Failure to reply within the set or extended period for reply will Any reply received by the Office later than three months after earned patent term adjustment. See 37 CFR 1.704(b). | ATION. 37 CFR 1.136(a). In no event, however, may a lication. days, a reply within the statutory minimum of thir ory period will apply and will expire SIX (6) MON I, by statute, cause the application to become Af | reply be timely filed ty (30) days will be considered timely. TTHS from the mailing date of this cor BANDONED (35 U.S.C. § 133). | | | | | |
| Status | | | | | | | |
| 1) Responsive to communication(s) filed | on 16 November 2005 | | | | | | |
| ·— · |) This action is non-final. | | | | | | |
| <u></u> | · | ters, prosecution as to the | merits is | | | | |
| , | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | , | | | | | |
| • | n in the application | | | | | | |
| | ✓ Claim(s) <u>1-33 and 39-42</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | Withdrawn nom consideration. | | | | | | |
| 6)⊠ Claim(s) <u>1-33 and 39-42</u> is/are rejected | · <u> </u> | | | | | | |
| 7) Claim(s) is/are objected to. | • | | | | | | |
| | Claim(s) is/are objected to. Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| | | | | | | | |
| Application Papers | | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | | |
| 10) ☐ The drawing(s) filed on 16 July 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | |
| 11) I he oath or declaration is objected to b | y the Examiner. Note the attached | 3 Office Action of form PTC | J-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | , | | | | |
| 12) Acknowledgment is made of a claim for a) All b) Some * c) None of: 1. Certified copies of the priority do | | } 119(a)-(d) or (f). | | | | | |
| | ocuments have been received in A | Application No | | | | | |
| 3. Copies of the certified copies of | | | Stage | | | | |
| application from the Internationa | | | 90 | | | | |
| * See the attached detailed Office action | , | received. | | | | | |
| | | | | | | | |
| Attachment(s) | | | | | | | |
| 1) Notice of References Cited (PTO-892) | | Summary (PTO-413) s)/Mail Date | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTC 3) Information Disclosure Statement(s) (PTO-1449 or PT Paper No(s)/Mail Date | | nformal Patent Application (PTO | -152) | | | | |

1. The following is a **FINAL** office action upon examination of application number 09/828,530. Claims 1-33 and 39-42 are pending in the application and have been examined on the merits discussed below.

Response to Amendment

2. Applicant's amendment was filed November 16, 2005, canceling claims 34-38 and 43-45. Claims 1-11 16-22, 24-28, 30-33, 39-42 and the specification have been amended.

Response to Arguments

3. Applicant's arguments with respect to claims 1-33 and 39-42 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

4. Previous drawing objections made under 37 CFR 1.84(p)(5) are withdrawn in view of Applicant's amendment to the specification.

Art Unit: 3623

Claim Rejections - 35 USC § 112

5. Previous rejections to claims 16-20 and 32 raised under 35 U.S.C. 112, second paragraph are withdrawn.

Claim Rejections - 35 USC § 101

6. Previous rejections to claims 1-10, 21-33, and 43-45 rejected under 35 U.S.C. 101 are withdrawn.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-33, and 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samra et al. (U.S Patent #6,970,830), and further in view of Anderson et al. (U.S Patent #6,078,892).

Page 3

Application/Control Number: 09/828,530 Page 4

Art Unit: 3623

As per claim 1, Samra et al. teaches a method for generating customer leads for use by dealers attempting to sell a product to a plurality of customers using a computer coupled to a database (customer database 14 is accessible by server 16, which stores the database in a relational database such that the consumer data is accessible to a targeting engine), said method comprising the steps of:

- (a) storing customer information within the database (consumer database 14; transaction database) including age, gender, income and payment history for each of the plurality of customers (age, gender, income, transaction history; how often payments have been made, how much was paid, in total and at each payment, any arrears, and the percentage of the loan paid) [Column 2, lines 14-16, Column 3, lines 34-36];
- (b) applying propensity models using the computer to one or more customers stored within the database, the propensity models including an early termination model (early termination (attrition) model) and a cross-selling model (cross-sell response), the early termination model for predicting a probability of early termination of a loan by the one or more customers wherein early termination includes a likelihood a customer will terminate a loan provided by the dealer before a contract life of the loan expires by prepaying the loan (how likely is the customer to close out an account early), the cross-selling model for predicting a probability of cross-selling to a predicted early termination customer wherein cross-selling includes a likelihood a customer will purchase another product from the dealer (how likely is the customer to avail

themselves to another product (cross-sell)) to retain the early termination customer as an active customer of the dealer [Column 2, lines 46-58];

- (c) applying an activation model and a timing model using the computer to one or more customers stored within the database, the activation model for predicting a probability of activating the one or more customers stored within the database (reactivation model) including a likelihood that an inactive customer will accept an offer to sell a product from the dealer and become an active customer (how likely is the customer to avail themselves to another product (cross-sell)); and
- termination model and the cross-selling model, or satisfying the activation model (generate a potential customer list based on scores based on demographics and the propensity to buy another loan product; combining the models embedded within the targeting engine to define an initial customer group including a list of customers satisfying each of the combined models), wherein an early termination customer satisfying the cross-selling model is an early termination customer predicted to purchase another product from the dealer (how likely is the customer to avail themselves to another product (cross-sell)), and a customer satisfying the activation model is an inactive customer predicted to accept an offer to sell a product form the dealer [Column 3, lines 51-54, Claim 1].

Samra et al. does not explicitly teach the step of storing information of inactive customers. However, it is old and well known in the business arts that businesses retain

information on all customers (for a reasonable length of time), which would include currently active and inactive customers. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Samra et al. to include all customers (current and past, active and inactive) in an attempt to develop customized marketing strategies and offers with a higher likelihood of customer response, which would lead to increased profits and revenue, and extend the customer relationship.

Samra et al. does not explicitly teach the step of predicting when customers will accept an offer. However, Blume et al. teaches the step of identifying when customers will respond to an offer (predicting behavior of the target consumer; predicting spending within a predicted time period) [Claims 9 and 24].

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Samra et al. to include the step of predicting when customers will accept an offer because the resulting combination would enable companies sufficient time to develop profitable cross-selling promotions, or targeted proposals (such as lower interest rates and financing charges, etc.), which would reduce the likelihood for customer attrition and extend the customer relationship.

Samra et al. does not explicitly teach the step of providing the customer lead list to one or more dealers.

However, Anderson et al. teaches the step of providing the potential customer list (outputting the collection of ordered customer records; storing customer list in memory and making it accessible through a LAN, WAN or any other conventional method of interconnecting computers) to one or more dealers [Claim 1, Column 11, lines 62-65 and Column 12, lines 5-12].

Both Samra et al. and Anderson et al. are directed towards the analogous art of analyzing data to identify potential customer leads. Samra et al. lacks the step of providing the generated list of potential customer leads to a dealer, a concept taught by Anderson et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Samra et al. to include the step of providing the potential customer list to dealers because the resulting combination would enable said dealers to proactively develop profitable cross-selling promotions, or targeted proposals (such as lower interest rates and financing charges, etc.), which would reduce the likelihood for customer attrition and extend the customer relationship.

As per claim 2, Samra et al. teaches a method according to claim 1 wherein said step of applying propensity models further comprises the step of identifying early termination customers using a propensity model (early termination (attrition) model), wherein the propensity model identifies prepaying customers (propensity model is

Art Unit: 3623

used to supply predicted answers to questions such as how likely is the customer to close out an account early) [Column 2, lines 53-57].

Samra et al. does not explicitly teach the step of identifying customers at least three months before said customer repays their loan. However, Blume et al. teaches the step of predicting user behavior within a certain time period (predicting behavior of the target consumer; predicting spending within a predicted time period) [Claims 9 and 24].

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Samra et al. to include the step of identifying prepaying customers 3 months ahead of time because the resulting combination would enable companies sufficient time to develop profitable cross-selling promotion, or targeted proposals (such as lower interest rates and financing charges, etc.), which would reduce the likelihood for customer attrition and extend the customer relationship.

As per claim 3, Samra et al. teaches a method according to claim 1 including the step of applying an activation model. Samra et al. does not explicitly teach the use of a timing model to identify when customers will purchase from the dealer.

However, Blume et al. teaches the step of identifying when customers will purchase from the dealer (predicting behavior of the target consumer; predicting spending within a predicted time period) [Claims 9 and 24].

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Samra et al. to include the timing model as taught by Blume et al. since the resulting method would provide for a more efficient, effective, and robust approach towards marketing, resource requirements, client needs and market share, which would lead to increased profits and revenue.

As per claim 4, Samra et al. does not explicitly teach a method according to claim 1 wherein said step of storing customer information further comprises storing the customer information including customer information on at least one of active customer files and inactive customer files.

However, it is old and well known in the business art that companies retain customer information for all customers (for a reasonable length of time), which would include currently active and inactive customers. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Samra et al. to include all customers (current and past, active and inactive) in an attempt to develop marketing strategies and offers with a higher likelihood of customer response, which

would lead to increased profits and revenue, and extend the customer relationship lifetime.

As per claim 6, although not explicitly taught by Samra et al., Anderson et al. teaches a method according to claim 1 wherein said step of providing the customer lead list further comprises the step of:

(a) holding the customer list (stored on memory) on a web-based system (accessible through a LAN, WAN, or any other conventional method of interconnecting computers) [Column 11, lines 62-65, Column 12, lines 5-12]; and

Although not explicitly taught by Samra et al. or Anderson et al., the step of providing users with access to a web-based system is old and well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined teachings of Samra et al. and Anderson et al. to provide users with access to a web-based system containing a customer list because the resulting combination would provide the user with a convenient means of accessing information, and the use of web-based systems further provides users with user accounts (complete with passwords and data encryption methods) that enable secure access to the customer lead information that would prevent unauthorized users from viewing sensitive proprietary data.

As per claim 7, although not explicitly taught by Samra et al., Anderson et al. teaches a method according to claim 1 wherein said step of providing the customer lead list further comprises the step of providing dealer access to the customer list through a telephone based system (land-based telephone line, or cellular line) [Column 12, lines 11-12].

Page 11

As per claim 8, Samra et al. does not explicitly teach a method according to claim 1 wherein said step of providing the customer lead list further comprises the step of mailing the customer list to the dealers through at least one of electronic-mail, the postal service, and a courier service.

However, the concept of mailing information to customers via electronic mail, the postal service, or a courier service are direct marketing concepts that are old and well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Samra et al. to include the physical delivery of the potential customer list in order to enable the company to provide such information to individuals incapable or unwilling to view the information using digital or telephonic methods.

As per claim 9, although not explicitly taught by Samra et al., Anderson et al. teaches a method according to claim 1 further comprising the step of providing results of customer contacts generated from the customer lead list to the database of customer

Art Unit: 3623

information (storing data records satisfying one or more traits in the storage device or other memory) [Column 5, lines 45-47].

As per claim 10, Samra et al. teaches a method according to claim 1 wherein said step of providing the customer lead list further comprises the step of determining which customers will respond to a dealer initiated contact (determine how likely the customer is to avail themselves to another product) using a direct response model (response model) [Column 2, lines 56-58].

Claims 11-33 and 39-42 recite limitations similar to those of claims 1-10 above; therefore, the same rejection applies.

3. Claims 5, 15, 24, 32, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samra et al. (U.S Patent #6,970,830) and Anderson et al. (U.S Patent #6,078,892), as applied to claims 1, 11, 21, 30 and 39 above, and further in view of Blume et al. (U.S Patent #6,839,682).

As per claim 5, although not explicitly taught by the combined teachings of Samra et al. and Anderson et al., Blume et al. teaches a method according to claim 1 wherein said step of generating a customer lead list further comprises the steps of:

Application/Control Number: 09/828,530 Page 13

Art Unit: 3623

(a) clustering customers into customer groups according to customer characteristics (generating groups based on the analysis of consumer financial behavior) [Column 3, lines 20-26]; and

(b) identifying specific needs (underlying consumer interests) for each customer group [Column 3, lines 25-26].

Samra et al., Anderson et al., and Blume et al. are all directed towards the analogous art of applying marketing models and metrics to customer data to yield customer leads. The combined teachings of Samra et al. and Anderson et al. analyze customers on an individual level, and do not cluster customers into groups, a concept taught by Blume et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Samra et al. include the clustering step as taught by Blume et al. in order to create specialized targeted offers best suited to meet the specific needs of customers based on the customer segment they are clustered into.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Choi whose telephone number is (571) 272 6971. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Choi Examiner Art Unit 3623 Page 15

February 3, 2006

SUSANNA M. DIAZ PRIMARY EXAMINER

Au 3623